

ABSTRACT OF THE DISCLOSURE

A CPP giant magnetoresistive head includes lower and upper shield layers with a predetermined shield distance therebetween, and a giant magnetoresistive element including a pinned magnetic layer and a free magnetic layer which are disposed between the upper and lower shield layers with a nonmagnetic layer interposed the pinned magnetic layer and the free magnetic layer, a current flowing perpendicularly to the film plane of the giant magnetoresistive element. The magnetoresistive head further includes an antiferromagnetic layer provided in the rear of the giant magnetoresistive element in a height direction to make contact with the upper or lower surface of a rear portion of the pinned magnetic layer which extends in the height direction, and an exchange coupling magnetic field is produced at the interface with the upper or lower surface, so that the magnetization direction of the pinned magnetic layer is pinned by the exchange coupling magnetic field in the height direction. The antiferromagnetic layer is an insulating antiferromagnetic comprising Ni-O or α -Fe₂O₃.